INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.in.gov/idem

November 5, 2003

TO: Interested Parties / Applicant

RE: Polygon Company / F141-17842-00062

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

(1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
(2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
(3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

(1) the name and address of the person making the request;
(2) the interest of the person making the request;
(3) identification of any persons represented by the person making the request;
(4) the reasons, with particularity, for the request;
(5) the issues, with particularity, proposed for considerations at any hearing; and
(6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER.dot 9/16/03

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)

OFFICE OF AIR QUALITY

Polygon Company
103 Industrial Park Drive
Walkerton, Indiana 46574

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F141-17842-00062	
Issued by:Original signed by Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date:November 5, 2003 Expiration Date:November 5, 2008

TABLE OF CONTENTS

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.3.3 Record Keeping Requirements

D.3.4 Reporting Requirements

Certification Form
Emergency/Deviation Occurrence Form
Quarterly Report Forms
Quarterly Deviation and Compliance Monitoring Report Form

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in A.1, A.3, and A.4 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary source manufacturing fiberglass reinforced plastic tubing.

Authorized individual:	Charles Mitchell
Source Address:	103 Industrial Park Drive, Walkerton, Indiana 46574
Mailing Address:	P. O. Box 176, Walkerton, Indiana 46574
General Source Phone:	219-586-3145
SIC Code:	3089
Source Location Status:	St. Joseph Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP) Minor Source, under PSD or Emission Offset Rules; Minor Source, Section 112 of the Clean Air Act

A.2 Source Definition [326 IAC 2-8-1] [326 IAC 2-7-1(22)]

This fiberglass reinforced plastic tubing manufacturing company consists of two (2) plants:

(a) Plant 1 is located at 103 Industrial Park Drive, Walkerton, Indiana 46574; and

(b) Plant 2 is located on Tennessee Street, Walkerton, Indiana 46574.

Because the two (2) plants are owned by one (1) company, are adjacent (0.25 miles apart), have the same SIC codes, and because all products manufactured at Plant 2 are transferred to Plant 1 for final fabrication, they will be considered one (1) source.

A.3 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

(a) Seven (7) pultrusion lines, identified as PL1 through PL7, with a maximum capacity of 83.8 pounds per hour, exhausting to stacks V2 and V3.

(b) One (1) spray booth, identified as B1, for the surface coating of fiberglass reinforced plastic tubing, with a maximum capacity to coat 50 tubes per hour, equipped with dry filters for air pollution control, and exhausting to stacks V4 and V5.

(c) One (1) gel coat spray booth, identified as B2, for the surface coating of fiberglass reinforced plastic tubing, with a maximum capacity of 53.5 pounds per hour, equipped with dry filters for air pollution control, and exhausting to stacks V7 and V8.

(d) One (1) filament winding area, identified as F2, with a maximum capacity of 47.0 pounds per hour, emissions are fugitive.

A.4 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British Thermal Units per hour

(1) One (1) natural gas-fired boiler with heat input of 0.85 MMBtu per hour boiler.

(2) Ten (10) natural gas fired curing ovens.

(3) Four (4) radiant heaters, fifteen (15) space heaters, and three (3) air make-up units.

(b) Various machining operations where aqueous cutting coolant continuously floods the machining interface; seventeen (17) grinders, one (1) filter press, five (5) auto saws, nine (9) chop saws, eight (8) small grinding machines, seven (7) lathes, three (3) bandsaws, eleven (11) dieelectric testers, twelve (12) drill presses, five (5) computerized mills, one (1) air rotation unit, two (2) fiberglass winding line, two (2) wet cutting/grinding lines and one (1) auto deburr.

(c) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.

(d) Paved and unpaved roads and parking lots with public access.

(e) Three (3) spindle winder attachment and one (1) 6-spindle winder, one (1) fiberglass trimming and grinding area known as the Large Filament Wind Grinding Area, that does not produce fugitive emissions, with PM emissions less than 5 pounds per hour or 25 pounds per day, and equipped with a Torit Donaldson dust collector.

(f) One (1) fiberglass trimming and grinding area known as the US6, that does not produce fugitive emissions, with PM emissions less than 5 pounds per hour or 25 pounds per day, and equipped with a Torit Donaldson dust collector.

(g) Six (6) electric ovens for fiberglass curing and drying, emitting less than 12.5 pounds per day of any combination of HAPs.

(h) Particulate emissions from the pultrusion area of less than 5 pounds per hour or 25 pounds per day, controlled by a baghouse dust collector.

(i) Research and Development operations – which will produce parts for new product testing and marketing research samples for a potential new product designated as continuous fiber thermoplastic (CFT).

(j) Eight (8) rubber encapsulated fiberglass strand manufacturing lines, with emissions below exemption levels as defined in 326 IAC 2-1.103.

A.5 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) for a Federally Enforceable State Operating Permit (FESOP).

A.6 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either

(1) incorporated as originally stated,

(2) revised, or

(3) deleted

by this permit.

(b) All previous registrations and permits are superseded by this permit.

SECTION B GENERAL CONDITIONS

B.1 Permit No Defense [IC 13]

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

B.2 Definitions [326 IAC 2-8-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2, and 326 IAC 2-7) shall prevail.

B.3 Permit Term [326 IAC 2-8-4(2)][326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

B.4 Enforceability [326 IAC 2-8-6]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.5 Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

B.6 Severability [326 IAC 2-8-4(4)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.7 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

B.8 Duty to Provide Information [326 IAC 2-8-4(5)(E)]

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit.

(b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1 When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]

(a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:

(1) Enforcement action;

(2) Permit termination, revocation and reissuance, or modification; and

(3) Denial of a permit renewal application.

(b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(c) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an authorized individual of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.

(c) An authorized individual is defined at 326 IAC 2-1.1-1(1).

B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15 of each year to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(c) The annual compliance certification report shall include the following:

(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
(2) The compliance status;

(3) Whether compliance was continuous or intermittent;
(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and
(5) Such other facts as specified in Sections D of this permit, IDEM, OAQ, may require to determine the compliance status of the source.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.13 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The PMP extension notification does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.14 Emergency Provisions [326 IAC 2-8-12]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an

action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section)
or,
Telephone No.: 317-233-5674 (ask for Compliance Section)
Facsimile No.: 317-233-5967, or,
Telephone No.: 219-245-4870 (Northern Regional Office)
Facsimile No.: 219-245-4877

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.

(g) Operations may continue during an emergency only if the following conditions are met:

(1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

(B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

(h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]

(c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

B.17 Permit Renewal [326 IAC 2-8-3(h)]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

(b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]

(1) A timely renewal application is one that is:

(A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(2) If IDEM, OAQ upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.

(c) Right to Operate After Application for Renewal [326 IAC 2-8-9]
If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as needed to process the application.

B.18 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]

(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application shall be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

(d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.

B.19 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]

(a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions is met:

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any approval required by 326 IAC 2-8-11.1 has been obtained;

(3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality

100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015
and
United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-8-15(b)(2), (c)(1), and (d).

(b) Emission Trades [326 IAC 2-8-15(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).

(c) Alternative Operating Scenarios [326 IAC 2-8-15(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.

B.20 Permit Revision Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.

B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)] [IC 13-14-2-2][IC13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring

compliance with this permit or applicable requirements; and

(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.22 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

(a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16][326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.

(b) Failure to pay may result in administrative enforcement action, or revocation of this permit.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4320 (ask for OAQ, I/M & Billing Section), to determine the appropriate permit fee.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [40 CFR 52 Subpart P][326 IAC 6-3-2]

(a) Pursuant to 40 CFR 52 Subpart P, particulate matter emissions from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

(b) Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

(1) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and

(2) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

(b) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.

(c) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.4 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4

or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and in 326 IAC 9-1-2.

C.6 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.8 Operation of Equipment [326 IAC 2-8-5(a)(4)]

Except as otherwise provided by statute, rule or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.10 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the

information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1 emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Demolition and renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

Testing Requirements [326 IAC 2-8-4(3)]

C.11 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.12 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure

compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.13 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule with full justification of the reasons for inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Unless otherwise specified in the approval for the new emissions unit, compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.

C.14 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing performed required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63 or other approved methods as specified in this permit.

Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.15 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]

If a regulated substance as defined in is present at a source in more than a threshold quantity, the source must comply with the applicable requirements of 40 CFR 68.

C.16 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-8-4] [326 IAC 2-8-5]

(a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and is comprised of:

(1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an

expected time frame for taking reasonable response steps.

(2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.

(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:

(1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or

(2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.

(3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.

(4) Failure to take reasonable response steps shall be considered a deviation from the permit.

(c) The Permittee is not required to take any further response steps for any of the following reasons:

(1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.

(3) An automatic measurement was taken when the process was not operating.

(4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.

(d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.

(e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-8-12 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

(f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4][326 IAC 2-8-5]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

C.18 Emission Statement [326 IAC 2-6] [326 IAC 2-8-4(3)]

(a) The Permittee shall submit an emission statement certified pursuant to the requirements of 326 IAC 2-6. This statement must be received in accordance with the compliance schedule specified in 326 IAC 2-6-3 and must comply with the minimum requirements specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8). The statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The emission statement does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

C.19 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee,

the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.20 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

(a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC2-1.1-1(1).

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(e) The first report covered the period commencing on the date of issuance of the original FESOP and ended on the last day of the reporting period. All subsequent reporting periods shall be based on calendar years.

Stratospheric Ozone Protection

C.21 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

(a) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156

(b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

(c) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

Industrial Park Drive Plant

(a) Seven (7) pultrusion lines, identified as PL1 through PL7, with a maximum capacity of 83.8 pounds per hour, exhausting to stacks V2 and V3.

(b) One (1) spray booth, identified as B1, for the surface coating of fiberglass reinforced plastic tubing, with a maximum capacity to coat 50 tubes per hour, equipped with dry filters for air pollution control, and exhausting to stacks V4 and V5.

(d) One (1) gel coat spray booth, identified as B2, for the surface coating of fiberglass reinforced plastic tubing, with a maximum capacity of 53.5 pounds per hour, equipped with dry filters for air pollution control, and exhausting to stacks V7 and V8.

(d) One (1) filament winding area, identified as F2, with a maximum capacity of 47.0 pounds per hour, emissions are fugitive.

Tennessee Street Plant

(e) Nine (9) resin dip tanks, identified as RD1 through RD9, with a maximum capacity of 95.0 pounds per hour, exhausting to stack V6.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-1-6] **Pultrusion Lines**

Use of resins and solvents for each pultrusion line shall be limited such that the potential to emit (PTE) of Volatile Organic Compounds (VOC) shall be less than 25 tons per consecutive 12 month period, with compliance determined at the end of each month. Therefore, the best available control technology (BACT) requirement in 326 IAC 8-1-6, (New Facilities: General Reduction Requirements), does not apply. Compliance with this limit shall be determined based upon the following criteria:

(a) Monthly usage by weight, percentage of volatile organic compounds, and method of application shall be recorded for each resin and solvent. Volatile organic compound emissions shall be calculated by multiplying the usage of each resin and solvent by the emission factor that is appropriate for the percentage of volatile organic compounds or styrene monomer content, and the method of application, and summing the emissions for all resins and solvents. Emission factors shall be obtained from a reference approved by IDEM, OAQ.

(b) The emission factors approved for use by IDEM, OAQ for polyester and vinyl resin shall be taken from the following reference: "Unified Emission Factors for Open Molding of Composites," Composites Fabricators Association, July 23, 2001, for open molding and filament winding, with the exception of the emission factors for controlled spray application. This reference is included with this permit. The emission factors for all other VOC emitting compounds shall be 100% of the input volatile organic compounds.

D.1.2 Volatile Organic Compounds (VOC) [326 IAC 8-1-6] **Resin Dip Tanks**

The input volatile organic compound (VOC) usage in the nine (9) resin dip tanks, identified as RD1 through RD9, shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period, with compliance determined at the end of each month. Therefore, the best available control technology (BACT) requirement in 326 IAC 8-1-6 (New Facilities: General Reduction Requirements) does not apply.

D.1.3 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

(a) Any change or modification to the Pultrusion Line Surface Coating Operation (B1) which may increase the potential to emit of VOC to 25 tons per year, shall cause 326 IAC 8-1-6 (New Facilities: General Reduction Requirements) to be applicable, and shall require approval from IDEM, OAQ prior to making the change.

(b) Any change or modification to the Gel Coating Operation (B2) which may increase the potential to emit of VOC to 25 tons per year, shall cause 326 IAC 8-1-6 (New Facilities: General Reduction Requirements) to be applicable, and shall require approval from IDEM, OAQ prior to making the change.

(c) Any change or modification to the Filament Winding Operation (F2) which may increase the potential to emit of VOC to 25 tons per year, shall cause 326 IAC 8-1-6 (New Facilities: General Reduction Requirements) to be applicable, and shall require approval from IDEM, OAQ prior to making the change.

D.1.4 Particulate Matter (PM) [326 IAC 6-3-2 (Process Operations) and 40 CFR 52 Subpart P]

Pursuant to 326 IAC 6-3-2 (Process Operations):

(a) The PM from the spray booth, known as B1, shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

The surface coating operation at the paint booth (B1) shall be controlled by the dry particulate filters, and operated according to manufacturer's specifications, at all times that the paint booth B1 is in operation.

D.1.5 Particulate Matter [326 IAC 6-3-2(d)]

Pursuant to Part 70 No.: 141-10871-00062 and 326 IAC 6-3-2(d), particulate from the spray booth, known as B1, shall be controlled by the dry filters at all times that the spray booth B1 is in operation, and the Permittee shall operate the control device in accordance with manufacturer's specifications.

D.1.6 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

Compliance Determination Requirements

D.1.7 Volatile Organic Compounds (VOC)[326 IAC 8-1-2][326 IAC 8-1-4]

Compliance with the VOC content and usage limitations contained in Conditions D.1.1 and D.1.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" VOC data sheets. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.1.8 Volatile Organic Compounds (VOC)[326 IAC 8-1-2][326 IAC 8-1-4]

Compliance with Conditions D.1.1 and D.1.2 shall be demonstrated within 30 days of the end of each month based on the total volatile organic compound usage for the twelve (12) consecutive month period.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.1.9 Monitoring

(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stacks V4 and V5 while the booth is in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan -Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan -Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.1.10 Record Keeping Requirements

(a) To document compliance with Conditions D.1.1, D.1.2 and D.1.3, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or VOC emission limits.

(1) The amount and VOC content of each resin, gelcoat, paint and solvent used. Records should include purchase orders, invoices, and material safety data sheets

(MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

(2) The cleanup solvent usage for each month;

(3) The total VOC usage for each month;

(4) The weight of VOCs emitted for each month.

(b) To document compliance with Condition D.1.9, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.11 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.1 and D.1.2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]: Insignificant Activities

(a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British Thermal Units per hour

(2) One (1) natural gas-fired boiler with heat input of 0.85 MMBtu per hour boiler.

(2) Ten (10) natural gas fired curing ovens.

(3) Four (4) radiant heaters, fifteen (15) space heaters, and three (3) air make-up units

(b) Various machining operations where aqueous cutting coolant continuously floods the machining interface; seventeen (17) grinders, one (1) filter press, five (5) auto saws, nine (9) chop saws, eight (8) small grinding machines, seven (7) lathes, three (3) bandsaws, eleven (11) dieelectric testers, twelve (12) drill presses, five (5) computerized mills, one (1) air rotation unit, two (2) fiberglass winding line, two (2) wet cutting/grinding lines and one (1) auto deburr.

(c) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.

(d) Paved and unpaved roads and parking lots with public access.

(e) Three (3) spindle winder attachment and one (1) 6-spindle winder, one (1) fiberglass trimming and grinding area known as the Large Filament Wind Grinding Area, that does not produce fugitive emissions, with PM emissions less than 5 pounds per hour or 25 pounds per day, and equipped with a Torit Donaldson dust collector.

(f) One (1) fiberglass trimming and grinding area known as the US6, that does not produce fugitive emissions, with PM emissions less than 5 pounds per hour or 25 pounds per day, and equipped with a Torit Donaldson dust collector.

(g) Six (6) electric ovens for fiberglass curing and drying, emitting less than 12.5 pounds per day of any combination of HAPs.

(h) Particulate emissions from the pultrusion area of less than 5 pounds per hour or 25 pounds per day, controlled by a baghouse dust collector.

(i) Research and Development operations – which will produce parts for new product testing and marketing research samples for a potential new product designated as continuous fiber thermoplastic (CFT).

(j) Eight (8) rubber encapsulated fiberglass strand manufacturing lines, with emissions below exemption levels as defined in 326 IAC 2-1.1-3.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.2.1 Particulate Matter [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating) the PM emissions from the 0.85 million Btu per hour heat input boiler shall be limited to 0.60 pounds per MMBtu heat input.

D.2.2 Particulate Matter [326 IAC 6-3-2]

(a) The particulate matter (PM) emissions from fiberglass trimming and grinding area known as the US6 will be limited to 1.029 pounds per hour when operating at a process weight rate of 254 pounds per hour.

The pounds per hour limitation was calculated from the following equation.

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour, and P = process weight rate in tons per hour.

$E = 4.10\ (0.127)^{0.67}$ tons per hour = 1.029 pounds per hour.

(b) The Large Filament Wind Grinding Area has a process weight rate of 17 pounds per hour. Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

D.2.3 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]

(a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaner degreaser facility, construction of which commenced after July 1, 1990, shall ensure that the following control equipment requirements are met:

(1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:

(A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius ($38^{O}C$) (one hundred degrees Fahrenheit ($100^{O}F$));

(B) The solvent is agitated; or

(C) The solvent is heated.

(2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury) or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius ($38^{O}C$) (one hundred degrees Fahrenheit ($100^{O}F$)), then the drainage facility must be internal such that articles are enclosed under the cover while draining.

The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

(3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).

(4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.

(5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury) or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius ($38^{O}C$) (one hundred degrees Fahrenheit ($100^{O}F$)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths

degrees Celsius (48.9^{O}C) (one hundred twenty degrees Fahrenheit (120^{O}F)):

(A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
(B) A water cover when solvent is used is insoluble in, and heavier than, water.
(C) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

(b) Pursuant to 326 IAC 8-3-5(b), the owner or operator of a cold cleaning facility shall ensure that the following operating requirements are met:

(1) Close the cover whenever articles are not being handled in the degreaser.

(2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.

(3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

Compliance Determination Requirements

D.2.4 Particulate Matter (PM)

In order to comply with Conditions C.1 and D.2.2, the Torit Donaldson dust collectors for PM control shall be in operation at all times when the Large Filament Wind Grinding Area and the fiberglass trimming area known as US6 are in operation.

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

Industrial Park Drive Plant

(a) Seven (7) pultrusion lines, identified as PL1 through PL7, with a maximum capacity of 83.8 pounds per hour, exhausting to stacks V2 and V3.

(b) One (1) spray booth, identified as B1, for the surface coating of fiberglass reinforced plastic tubing, with a maximum capacity to coat 50 tubes per hour, equipped with dry filters for air pollution control, and exhausting to stacks V4 and V5.

(e) One (1) gel coat spray booth, identified as B2, for the surface coating of fiberglass reinforced plastic tubing, with a maximum capacity of 53.5 pounds per hour, equipped with dry filters for air pollution control, and exhausting to stacks V7 and V8.

Insignificant Activities

(f) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6 [326 IAC 8-3-5].

(g) Research and Development operations – which will produce parts for new product testing and marketing research samples for a potential new product designed as continuous fiber thermoplastic (CFT).

(h) Eight (8) rubber encapsulated fiberglass strand manufacturing lines, with emissions below exemption levels as defined in 326 IAC 2-1.1-3.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

D.3.1 FESOP [326 IAC 2-8] and New Source Toxics Control [326 IAC 2-4.1-1]

The use of resins, gelcoats and solvents at this source shall be limited such that the potential to emit (PTE) of a single Hazardous Air Pollutant (HAP) shall be less that 10 tons per twelve (12) consecutive month period, and that of any combination of HAPs shall be less than 25 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. Compliance with these limits shall ensure non-applicability of 326 IAC 2-7 and 326 IAC 2-4.1-1.

Compliance with the HAP emissions limits shall be determined based upon the following criteria:

(a) Monthly usage by weight, percentage of HAPs, and method of application shall be recorded for each resin, gelcoat and solvent. Volatile organic compound emissions shall be calculated by multiplying the usage of each resin and solvent by the emission factor that is appropriate for the percentage of volatile organic compounds or styrene monomer content, and the method of application, and summing the emissions for all resins and solvents. Emission factors shall be obtained from a reference approved by IDEM, OAQ.

(b) The emission factors approved for use by IDEM, OAQ for polyester and vinyl resin shall be

taken from the following reference: "Unified Emission Factors for Open Molding of Composites," Composites Fabricators Association, July 23, 2001, for open molding and filament winding, with the exception of the emission factors for controlled spray application. This reference is included with this permit. The emission factors for all other HAP emitting compounds shall be 100% of the input HAP.

Compliance Determination Requirements

D.3.2 Hazardous Air Pollutants (HAP)[326 IAC 8-1-2][326 IAC 8-1-4]

Compliance with the Hazardous Air Pollutants (HAP) emissions limitations contained in Conditions D.3.1 shall be demonstrated within 30 days of the end of each month based on the total HAP emissions for the twelve (12) consecutive month period.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.3.3 Record Keeping Requirements

To document compliance with Condition D.3.1 the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken monthly and shall be complete and sufficient to establish compliance with the HAP emissions limits established in Conditions D.3.1.

(1) The amount and HAP content of each resin, gelcoat, paint and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

(2) The cleanup solvent usage for each month;

(3) The total HAP usage for each month and the weight of HAPs emitted for each compliance period.

D.3.4 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.3.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: Polygon Company
Source Address: Tennessee Street, Walkerton, Indiana 46574
Mailing Address: P. O. Box 176, Walkerton, Indiana 46574
FESOP No.: F141-17842-00062

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

9 Annual Compliance Certification Letter

9 Test Result (specify)

9 Report (specify)

9 Notification (specify)

9 Affidavit (specify)

9 Other (specify)

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

COMPLIANCE BRANCH
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT

Source Name:	Polygon Company
Source Address:	Tennessee Street, Walkerton, Indiana 46574
Mailing Address:	P. O. Box 176, Walkerton, Indiana 46574
FESOP No.:	F141-17842-00062

This form consists of 2 pages **Page 1 of 2**

9 This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (**2**) working days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:

Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by:

Title / Position:

Date: _____

Phone: _____

A certification is not required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

FESOP Quarterly Report

Source Name: Polygon Company
Source Address: Tennessee Street, Walkerton, Indiana 46574
Mailing Address: P. O. Box 176, Walkerton, Indiana 46574
FESOP No.: F141-17842-00062
Facility: Pultrusion Line, identified as PL1 through PL7
Parameter: Volatile Organic Compounds (VOC)
Limit: Use of resins and gelcoat for each pultrusion line shall be limited such that the potential to emit (PTE) of VOC shall be less than 25 tons per 12 consecutive month period with compliance determined at the end of each month

Monthly usage by weight, percentage of volatile organic compounds, and method of application shall be recorded for each resin and solvent. Volatile organic compound emissions shall be calculated by multiplying the usage of each resin and solvent by the emission factor that is appropriate for the percentage of volatile organic compounds or styrene monomer content, and the method of application, and summing the emissions for all resins and solvents. Emission factors shall be obtained from a reference approved by IDEM, OAQ.

The emission factors approved for use by IDEM, OAQ for polyester and vinyl resin shall be taken from the following reference: "Unified Emission Factors for Open Molding of Composites," Composites Fabricators Association, July 23, 2001, for open molding and filament winding, with the exception of the emission factors for controlled spray application. This reference is included with this permit. The emission factors for all other VOC emitting compounds shall be 100% of the input volatile organic compounds.

YEAR:_____ Pultrusion Line I. D. _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

FESOP Quarterly Report

Source Name: Polygon Company
Source Address: Tennessee Street, Walkerton, Indiana 46574
Mailing Address: P. O. Box 176, Walkerton, Indiana 46574
FESOP No.: F141-17842-00062
Facility: Resin Dip Tanks, identified as RD1 through RD9
Parameter: Volatile Organic Compounds (VOC)
Limit: Less than 25 tons usage per twelve (12) consecutive month period with compliance determined at the end of each month

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

FESOP Quarterly Report

Source Name: Polygon Company
Source Address: Tennessee Street, Walkerton, Indiana 46574
Mailing Address: P. O. Box 176, Walkerton, Indiana 46574
FESOP No.: F141-17842-00062
Facility: Emission Units in Section D.3
Parameter: Hazardous Air Pollutants (HAP)
Limit: The use of resins, gelcoats and solvents at this source shall be limited such that the potential to emit (PTE) of a single Hazardous Air Pollutant (HAP) shall be less that 10 tons per twelve (12) consecutive month period, and that of any combination of HAPs shall be less than 25 tons per twelve (12) consecutive month period, with compliance determined at the end of each month

Monthly usage by weight, percentage of HAPs, and method of application shall be recorded for each resin, gelcoat and solvent. Volatile organic compound emissions shall be calculated by multiplying the usage of each resin and solvent by the emission factor that is appropriate for the percentage of volatile organic compounds or styrene monomer content, and the method of application, and summing the emissions for all resins and solvents. Emission factors shall be obtained from a reference approved by IDEM, OAQ.

The emission factors approved for use by IDEM, OAQ for polyester and vinyl resin shall be taken from the following reference: "Unified Emission Factors for Open Molding of Composites," Composites Fabricators Association, July 23, 2001, for open molding and filament winding, with the exception of the emission factors for controlled spray application. This reference is included with this permit. The emission factors for all other HAP emitting compounds shall be 100% of the input HAP.

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Polygon Company
Source Address: Tennessee Street, Walkerton, Indiana 46574
Mailing Address: P. O. Box 176, Walkerton, Indiana 46574
FESOP No.: F141-17842-00062

Months: _____ **to** _____ **Year:** _____

Page 1 of 2

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".
9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.
9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	

Probable Cause of Deviation:
Response Steps Taken:

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed By: _____

Title/Position: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Federally Enforceable State Operating Permit (FESOP)

Source Background and Description

Source Name:	**Polygon Company**
Source Location:	**103 Industrial Park Drive, Walkerton, IN 46574**
County:	**St. Joseph**
SIC Code:	**3089**
FESOP No.:	**141-17842-00062**
Permit Reviewer:	**Madhurima D. Moulik**

The Office of Air Quality (OAQ) has reviewed a FESOP application from Polygon Company relating to the operation of a fiberglass reinforced plastic tubing manufacturing source.

Emission Units and Pollution Control Equipment

The source consists of the following emission units and pollution control devices:

Industrial Park Drive Plant

(a) Seven (7) pultrusion lines, identified as PL1 through PL7, with a maximum capacity of 83.8 pounds per hour, exhausting to stacks V2 and V3.

(b) One (1) spray booth, identified as B1, for the surface coating of fiberglass reinforced plastic tubing, with a maximum capacity to coat 50 tubes per hour, equipped with dry filters for air pollution control, and exhausting to stacks V4 and V5.

(c) One (1) gel coat spray booth, identified as B2, for the surface coating of fiberglass reinforced plastic tubing, with a maximum capacity of 53.5 pounds per hour, equipped with dry filters for air pollution control, and exhausting to stacks V7 and V8.

(d) One (1) filament winding area, identified as F2, with a maximum capacity of 47.0 pounds per hour, emissions are fugitive.

Tennessee Street Plant

(e) Nine (9) resin dip tanks, identified as RD1 through RD9, with a maximum capacity of 95.0 pounds per hour, exhausting to stack V6.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour.

(1) One (1) natural gas-fired boiler with heat input of 0.85 MMBtu per hour boiler.

(2) Ten (10) natural gas fired curing ovens.

(3) Four (4) radiant heaters, fifteen (15) space heaters, and three (3) air make-up units.

(b) Various machining operations where aqueous cutting coolant continuously floods the machining interface; seventeen (17) grinders, one (1) filter press, five (5) auto saws, nine (9) chop saws, eight (8) small grinding machines, seven (7) lathes, three (3) bandsaws, eleven (11) dieelectric testers, twelve (12) drill presses, five (5) computerized mills, one (1) air rotation unit, two (2) fiberglass winding line, two (2) wet cutting/grinding lines and one (1) auto deburr.

(c) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.

(d) Paved and unpaved roads and parking lots with public access.

(e) Three (3) spindle winder attachment and one (1) 6-spindle winder, one (1) fiberglass trimming and grinding area known as the Large Filament Wind Grinding Area, that does not produce fugitive emissions, with PM emissions less than 5 pounds per hour or 25 pounds per day, and equipped with a Torit Donaldson dust collector.

(f) One (1) fiberglass trimming and grinding area known as the US6, that does not produce fugitive emissions, with PM emissions less than 5 pounds per hour or 25 pounds per day, and equipped with a Torit Donaldson dust collector.

(g) Six (6) electric ovens for fiberglass curing and drying, emitting less than 12.5 pounds per day of any combination of HAPs.

(h) Particulate emissions from the pultrusion area of less than 5 pounds per hour or 25 pounds per day, controlled by a baghouse dust collector.

(i) Research and Development operations – which will produce parts for new product testing and marketing research samples for a potential new product designated as continuous fiber thermoplastic (CFT).

(j) Eight (8) rubber encapsulated fiberglass strand manufacturing lines, with emissions below exemption levels as defined in 326 IAC 2-1.1-3.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

(a) Part 70 Permit No. 141-10871-00062, issued on April 18, 2001;

(b) First Administrative Amendment No.: 141-14574-00062, issued on December 21, 2001; and

(c) Second Administrative Amendment No.: 141-17542-00062, issued on July 15, 2003.

Polygon Company, which has been operating under Part 70 permit No. 141-10871-00062, was classified as a major source of HAPs. In the letter dated August 18, 2003, Polygon Company has requested the emissions of a single HAP to be limited to 10 tons per year, and the emissions of a combination of HAPs to be limited to 25 tons per year. Therefore, a FESOP shall be issued pursuant to 326 IAC 2-8.

Source Definition

This fiberglass reinforced plastic tubing manufacturing company consists of two (2) plants:

(a) Plant 1 is located at 103 Industrial Park Drive, Walkerton, Indiana 46574; and

(b) Plant 2 is located on Tennessee Street, Walkerton, Indiana 46574.

Because the two (2) plants are owned by one (1) company, are adjacent (0.25 miles apart), have the same SIC codes, and because all products manufactured at Plant 2 are transferred to Plant 1 for final fabrication, they will be considered one (1) source. In addition, both plants were submitted in a single Part 70 application.

Recommendation

The staff recommends to the Commissioner that the FESOP be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A FESOP application for the purposes of this review was received on August 18, 2003.

Emission Calculations

See Appendix A of this document for detailed emission calculations from significant emission units.

Potential PM emissions from grinding operations = 6.63 tons/yr (based on CP 141-2991-00062, issued on November 19, 1993).

Emissions from combustion sources including boilers, space heaters, etc. (total maximum capacity = 4.925 mmBtu/hr):

PM/PM-10 =	0.06 tons per year
SO2 =	0.01 tons per year
NOx =	2.1 tons per year
VOC =	0.11 tons per year
CO =	0.42 tons per year

Potential to Emit of the Source Before Controls

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential to Emit (tons/yr)
PM	10.96
PM-10	10.96
SO_2	Negligible
VOC	89.0
CO	0.42
NO_x	2.1

HAPs	Potential to Emit (tons/yr)
Styrene	29.3
Toluene	1.13
EthylBenzene	0.003
Xylene	0.577
MEK	3.37
MIBK	0.007
Total	34.4

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is equal to or greater than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is equal to or greater than twenty-five (25) tons per year. Therefore, the source is subject to the provisions

of 326 IAC 2-7. The source will be issued a FESOP because the source will limit its emissions below the Title V levels.

Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Federally Enforceable State Operating Permit.

	Potential To Emit (tons/year)						
Process/facility	PM	PM-10	SO_2	VOC	CO	NO_x	HAPs
Pultrusion P1-P7	-	-	-	< 25	-	-	15.3
Pultrusion Line Surface Coating (B1)	0.419	0.419	-	8.47	-	-	5.09
Resin Dip (RD1-RD9)	-	-	-	< 25	-	-	-
Gelcoating (B2)	1.54	0.046	-	4.69	-	-	4.69
Filament Winding (F2)	-	-	-	9.55	-	-	-
Insignificant Activities	1.3	1.3	0.026	1.0	3.68	4.38	-
Total Emissions	3.3	1.77	0.026	73.7	3.68	4.38	Single HAP < 10 Combination HAPs < 25

County Attainment Status

The source is located in St. Joseph County.

Pollutant	Status
PM-10	attainment
SO_2	attainment
NO_2	attainment
Ozone	maintenance
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. St. Joseph County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.

(b) St. Joseph County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.

(c) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 or 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source is not subject to the Part 70 Permit requirements because the source has agreed to limit the potential to emit (PTE) of:

(a) each criteria pollutant is less than 100 tons per year,
(b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
(c) any combination of HAPs is less than 25 tons per year.

Federal Rule Applicability

(a) The 0.85 mmBtu/hr boiler is not subject to the requirements of the New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60), Subpart Dc because the maximum heat input capacity is below the applicability threshold of 10 mmBtu/hr.

(b) The degreasing operations at this source are not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP), Subpart T, since the degreasers do not use any halogenated solvents.

State Rule Applicability – Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration)

This source is not subject to 326 IAC 2-2 (Prevention of Significant Deterioration) since it is not one of the twenty-eight (28) listed source categories and the total source potential emissions of all pollutants are less than 250 tons per year.

326 IAC 2-8 (Federally Enforceable State Operating Permit)

This source, which is otherwise subject to 326 IAC 2-7 (Part 70), has agreed to limit the emission of individual HAP to 10 tons per year, and that of a combination of HAPs to 25 tons per year. In order to demonstrate compliance with these limits, the following conditions shall be applicable:

The Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the HAP usage limits. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

(1) The HAP content of each coating material and solvent used.

(2) The amount of coating material and solvent less water used on monthly basis.

  (a) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

  (b) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents.

(3) The cleanup solvent usage for each month;

(4) The total HAP usage for each month; and

(5) The weight of HAPs emitted for each compliance period.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than ten (10) tons per year of VOC. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the

minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8) (Emission Statement Operating Year).

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in the permit:

(a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-1 (Nonattainment Area Particulate Limitations)

The source is located in St. Joseph County, it could be subject to 326 IAC 6-1 (Nonattainment Area Particulate Limitations). However, because the potential to emit of PM for the source is less than 100 tons per year, and actual PM emissions are less than 10 tons per year, 326 IAC 6-1 is not applicable.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

None of the emission units at this source were subject to 326 IAC 2-4.1 at the time of issuance of Part 70 permit No. 141-10871-00062. The source has also agreed to limit the potential emissions to less than 10 tons per year of a single HAP or 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

State Rule Applicability – Individual Facilities

326 IAC 20-25 (Styrene Rule)

This fiberglass reinforced plastic tubing manufacturing source has agreed to limit the potential emissions of a single HAP to less 10 tons per year and that of a combination HAPs to less than 25 tons per year.Therefore, 326 IAC 20-25 does not apply.

326 IAC 6-2-4 (Emission limitations for facilities specified in 326 IAC 6-2-1(d))

The boiler, rated at 0.85 million British thermal units per hour, was installed after September 21, 1983, and is subject to the requirements of this rule that limits PM emissions as follows:

$$Pt = 1.09/Q^{0.26}$$

Where:

Pt = Pounds of particulate matter emitted per million British thermal units.

Q = Total source maximum operating capacity rating in million British thermal units heat input. The maximum operating capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's operation permit applica-tion, except when some lower capacity is contained in the facility's operation permit, in which case, the capacity specified in the operation permit shall be used.

Therefore, $Pt = 1.09/ (0.85)^{0.26} = 1.137$ pounds per million British thermal units.

326 IAC 6-2-4 also states that for Q less than 10 mmBtu per hour, Pt shall not exceed 0.6 pounds of particulate matter emitted per million British thermal units. Therefore, for the 0.85 mmBtu/hr boiler, Pt shall not exceed 0.6 pounds of PM/mmBtu.

The potential PM emission from this boiler is 0.0283 tons per year or 0.0076 pounds per million British thermal units. The boiler therefore complies with this rule.

326 IAC 6-3-2 (Process Operations) and 40 CFR 52 Subpart P

The Gel Coating Operation (B2) has potential PM emissions below 0.551 pounds per hour.Therefore, it is exempt from the requirements of 326 IAC 6-3-2.

(a) The particulate matter (PM) emissions from the Pultrusion Line Surface Coating Operation (B1) shall be limited by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour, and
P = process weight rate in tons per hour.

The surface coating operation at the paint booth (B1) shall be controlled by the dry particulate filters and shall operate the control device in accordance with manufacturer's specifications.

(b) The particulate matter (PM) emissions from fiberglass trimming and grinding area known as the US6 will be limited to 1.029 pounds per hour when operating at a process weight rate 254 pounds per hour.

The pounds per hour limitation was calculated from the following equation.

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour, and
P = process weight rate in tons per hour.

$E = 4.10\ (0.127 \text{ tons/hr})^{0.67} = 1.029$ pounds per hour.

(c) The Large Filament Wind Grinding Area has a process weight rate of 17 pounds per hour. Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

326 IAC 8-1-6 (VOC Rules: General Reduction Requirements)

The Pultrusion Lines P1 through P7 have unrestricted potential VOC emissions of greater than 25 tons per year. The Resin Dip processes R1 through R9 also have unrectricted potential VOC emissions of greater than 25 tons per year. However, since the source has agreed to limit emissions of VOCs from each of these facilities to less than 25 tons per year per 12 consecutive month period, 326 IAC 8-1-6 is not applicable. In order to demonstate compliance with these limits, the following conditions shall be applicable:

The permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or VOC emission limits.

(1) The amount and VOC content of each resin, gelcoat, paint and solvent used. Records should include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

(2) The cleanup solvent usage for each month;

(3) The total VOC usage for each month;

(4) The weight of VOCs emitted for each month.

All other emission units at this source have potential VOC emissions below 25 tons per year. Therefore, none of the emission units are subject to the requirements of 326 IAC 8-1-6.

326 IAC 8-3-5 (Organic Solvent Degreasing Operations: Cold Cleaner Degreaser Operation and Control)

The cold cleaner degreasers at the source (insignificant activities) were constructed after July 1, 1990, and are subject to the requirements of 326 IAC 8-3-5.

Pursuant to 326 IAC 8-3-5(a), the owner or operator of a cold cleaner degreaser facility shall ensure that the following control equipment requirements are met:

(1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:

(A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius ($38^{O}C$) (one hundred degrees Fahrenheit ($100^{O}F$));

(B) The solvent is agitated; or

(C) The solvent is heated.

(2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury) or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius ($38^{O}C$) (one hundred degrees Fahrenheit ($100^{O}F$)), then the drainage facility must be internal such that articles are enclosed under the cover while draining.

The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

(3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).

(4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.

(5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury) or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius ($38^{O}C$) (one hundred degrees Fahrenheit ($100^{O}F$)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius ($48.9^{O}C$) (one hundred twenty degrees Fahrenheit ($120^{O}F$)):

(A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.

(B) A water cover when solvent is used is insoluble in, and heavier than, water.

(C) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

(b) Pursuant to 326 IAC 8-3-5(b), the owner or operator of a cold cleaning facility shall ensure that the following operating requirements are met:

(1) Close the cover whenever articles are not being handled in the degreaser.

(2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.

(3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

Testing Requirements

Testing is not required at this source because emissions estimates are based upon the “Unified Emission Factors for Open Molding of Composites,” Composites Fabricators Associations, July 23, 2001, and applicant supplied Material Safety Data Sheets (MSDS).

Compliance Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the approporiate corrective actions within a specific time period.

The compliance monitoring requirements applicable to the surface coating booth B1 are as follows:

(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stacks V4 and V5 while the booth is in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan -Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan -Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Conclusion

The operation of this fiberglass reinforced plastic tubing manufacturing source shall be subject to the conditions of the FESOP 141-17842-00062.

Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations

Company Name: Polygon Company
Address City IN Zip: 103 Industrial Park Drive, Walkerton, Indiana 46574
Permit Number: 141-17842
Plt ID: 141-00062
Reviewer: Madhurima D. Moulik
Date: September 13, 2003

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Flash Off (Fraction)	Pounds VOC per gallon of coating less	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	Transfer Efficiency
P1- Putrusion Line																
Epoxy A	9.76	1.00%	0.0%	1.0%	0.0%	99.20%	0.06148	10.000	1.000	0.10	0.10	0.06	1.44	0.26	0.00	100%
Epoxy B	9.97	1.00%	0.0%	1.0%	0.0%	99.00%	0.06018	10.000	1.000	0.10	0.10	0.06	1.44	0.26	0.00	100%
Vinyl Resin	8.92	40.00%	0.0%	40.0%	0.0%	52.40%	0.06727	10.000	0.200	0.71	0.71	0.48	11.52	2.10	0.00	100%
Dion (R) Resin with added Styrene	9.05	53.37%	0.0%	53.4%	0.0%	38.30%	0.46940	10.000	0.220	1.06	1.06	4.99	119.71	21.85	0.00	100%
Peroxide	7.26	95.30%	0.0%	95.3%	0.0%	10.00%	0.00551	10.000	1.000	6.92	6.92	0.38	9.15	1.67	0.00	100%
S2488	8.88	100.00%	0.0%	100.0%	0.0%	0.00%	0.01689	10.000	1.000	8.88	8.88	1.50	36.00	6.57	0.00	100%
S210	8.99	100.00%	0.0%	100.0%	0.0%	0.00%	0.01947	10.000	1.000	8.99	8.99	1.75	42.00	7.66	0.00	100%
Total														**40.38**	**0.00**	
1- Pultrusion Line Surface Coating																
Polane Enamel	8.76	60.20%	0.0%	60.2%	0.0%	26.48%	0.00046	800.000	1.000	5.27	5.27	1.93	46.26	8.44	2.79	50%
Polane Reducer	7.04	100.00%	0.0%	100.0%	0.0%	0.00%	0.00100	1.000	1.000	7.04	7.04	0.01	0.17	0.03	0.00	100%
Total														**8.47**	**2.79**	
R1 - Resin Dip																
Epoxy A	9.76	1.00%	0.0%	1.0%	0.0%	99.20%	0.51230	9.000	1.000	0.10	0.10	0.45	10.80	1.97	0.00	100%
Epoxy B	9.97	1.00%	0.0%	1.0%	0.0%	99.00%	0.50150	9.000	1.000	0.10	0.10	0.45	10.80	1.97	0.00	100%
IPA - Anhydrous	6.58	100.00%	0.0%	100.0%	0.0%	0.00%	0.08443	9.000	1.000	6.58	6.58	5.00	120.00	21.90	0.00	100%
Total														**25.84**	**0.00**	
B2- Gel Coating																
Gelcoat	9.18	53.22%	0.0%	53.2%	0.0%	37.00%	0.32700	1.000	0.670	3.27	3.27	1.07	25.69	4.69	1.54	75%
														4.69	**1.54**	
Total																
F2 - Filament Winding																
Epoxy A	9.76	1.00%	0.0%	1.0%	0.0%	99.20%	0.92213	1.000	1.000	0.10	0.10	0.09	2.16	0.39	0.00	100%
Epoxy B	9.97	1.00%	0.0%	1.0%	0.0%	99.00%	0.90271	1.000	1.000	0.10	0.10	0.09	2.16	0.39	0.00	100%
S2488	8.88	100.00%	0.0%	100.0%	0.0%	0.00%	0.22523	1.000	1.000	8.88	8.88	2.00	48.00	8.76	0.00	100%
Total														**9.55**	**0.00**	
Source Total (Tons per Year)														**88.93**	**4.33**	

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used

Appendix A: Emission Calculations
HAP Emission Calculations

Company Name: Polygon Company
Address City IN Zip: 103 Industrial Park Drive, Walkerton, Indiana 46574
Permit Number: 141-17842
Plt ID: 141-00062
Permit Reviewer: Madhurima D. Moulik
Date: 13-Sep-03

Material	Density	Gallons of Material	Maximum	Flash-off	Weight %	Weight %	Weight %	Weight %	Weight %	Weight %	Styrene Emissions	Toluene Emissions	Ethyl Benzene Emissions	Xylene Emissions	MEK Emissions	MIBK Emissions
	(Lb/Gal)	(gal/unit)	(unit/hour)	Fraction	Styrene	Toluene	Ethyl Benzene	Xylene	MEK	MIBK	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)
P1 - Pultrusion Line																
Epoxy A	9.76	0.061475	10.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
Epoxy B	9.97	0.060181	10.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
Vinyl Resin	8.92	0.067265	10.00	0.20	40.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.10	0.00	0.00	0.00	0.00	0.00
Dion (R) Resin	9.17	0.436050	10.00	0.22	52.00%	0.00%	0.00%	0.00%	0.00%	0.00%	20.04	0.00	0.00	0.00	0.00	0.00
Peroxide	7.26	0.005510	10.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
Styrene	7.53	0.033201	10.00	0.22	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.41	0.00	0.00	0.00	0.00	0.00
S2488	8.88	0.061892	10.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
S210	8.99	0.019466	10.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
Total											**24.55**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
31 - Pultrusion Line Surface Coating																
Polane Enamel	8.76	0.000457	800.00	1.00	0.00%	8.00%	0.00%	4.00%	24.00%	0.00%	0.00	1.12	0.00	0.56	3.37	0.00
Polane Reducer	7.04	0.001000	1.00	1.00	0.00%	15.00%	9.00%	52.00%	0.00%	24.00%	0.00	0.00	0.00	0.02	0.00	0.01
Total											**0.00**	**1.13**	**0.00**	**0.58**	**3.37**	**0.01**
R1- Resin Dip																
Epoxy A	9.76	0.512296	9.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
Epoxy B	9.97	0.501504	9.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
IPA - Anhydrous	6.58	0.084431	9.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
Total											**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
B2 - Gel Coating																
Gelcoat	9.18	0.327000	1.00	0.67	53.22%	0.00%	0.00%	0.00%	0.00%	0.00%	4.69	0.00	0.00	0.00	0.00	0.00
Total											**4.69**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
F2 - Filament Winding																
Epoxy A	9.76	0.922130	1.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
Epoxy B	9.97	0.902710	1.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
S2488	8.88	0.225230	1.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
Total											**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Source Total											**29.24**	**1.13**	**0.00**	**0.58**	**3.37**	**0.01**

Total State Potential Emissions

Combined HAP (Tons/yr) = **34.32**

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

Hapcalc.xls 9/95